

Trend of early breast cancer surgery in Hospital Sultan Ismail, Johor

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Introduction

Globally there is a shift towards less invasive surgeries for early breast cancer aligns with increasing emphasis on patient quality of life, advances in diagnostic imaging and surgical techniques, and a growing body of evidence supporting the efficacy of conservative treatments in terms of survival and safety. ¹⁻³

Objective

- Assess trends in early breast cancer surgery (2019-2023) – stage I, II
- Compare surgical approaches with global standards
- Focus on preference of type of surgery for early breast cancer patient in HIS
- Attempt to understand the factors affecting the choice

Methodology

- Combination of Retrospective observational cohort study
- A survey with phone interview to assess key factors affecting patient's surgery decisions
- Demographic data affect the choice of surgery were analyzed using chi square test

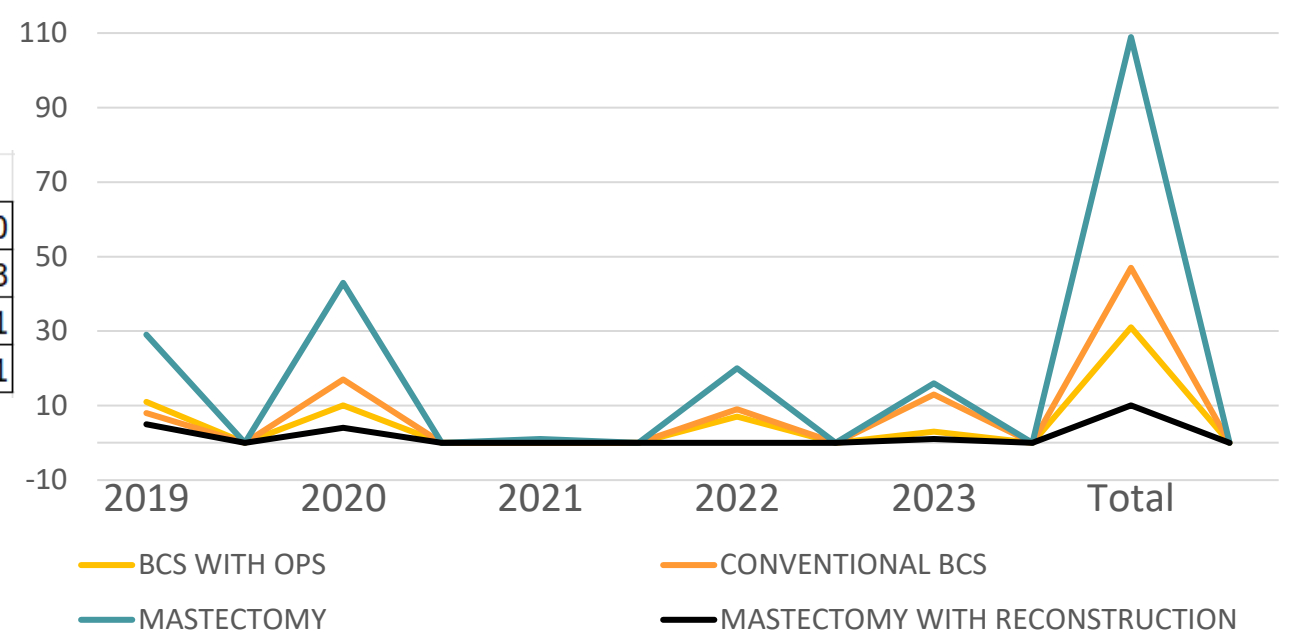
Total number of patients
N = 222

Excluded Deemed Not Suitable For Breast Conserving Surgery
N = 25

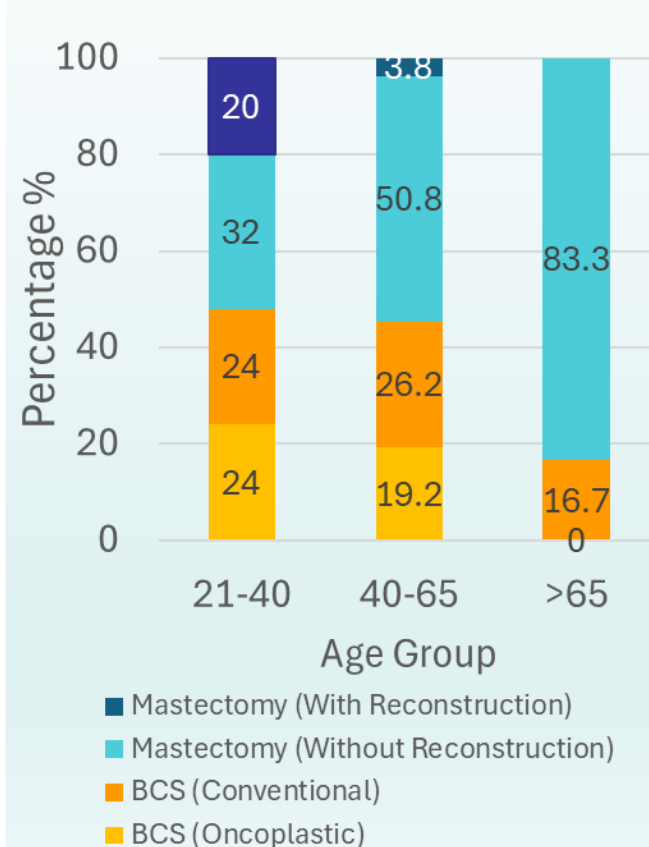
Reasons deemed not suitable for breast conserving surgery	
Multicentric disease	20
Diffuse malignant micofocalcifications on mammography	3
The use of breast irradiation in contraindicated	1
History of prior therapeutic radiation	1

Patient Demography	Type of Surgery Chosen				p Value
	Bcs (Oncoplastic)	BCS (Conventional)	Mastectomy (Without Reconstruction)	Mastectomy (With Reconstruction)	
Age Group					<0.05
21-40	6	6	8	5	
40-65	25	34	66	5	
>65	0	7	35	0	
Breast Cancer Subtype					0.9
Luminal A	10	14	38	4	
Luminal B	9	11	19	1	
Luminal HER2 High	3	8	16	1	
Luminal HER2 Low	5	4	9	2	
Non Luminal HER 2 +ve	3	5	19	1	
Triple Negative	1	5	8	1	
Pre-operative Neoadjuvant Treatment					0.4
Yes	9	11	40	4	
No	22	36	69	6	
Race					<0.05
Malay	26	34	50	5	
Chinese	4	10	44	4	
Indian	1	2	15	1	
Other	0	0	1	0	

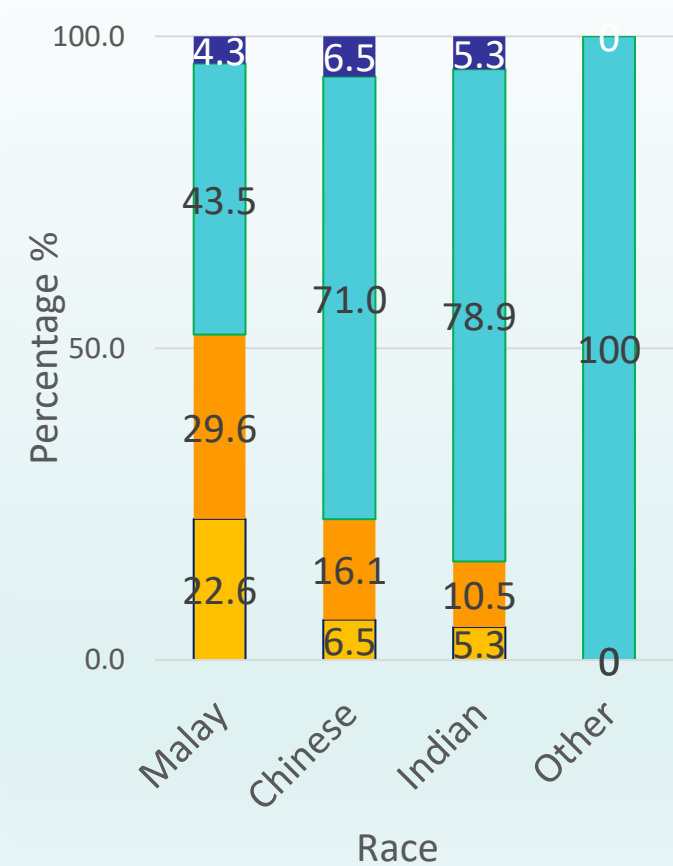
TYPES OF SURGERY CHOSEN FOR EARLY BREAST CANCER EXCLUDING ABSOLUTE CONTRAINDICATED CASES FOR BREAST CONSERVING SURGERY (BCS)



Surgical Option By Age Group

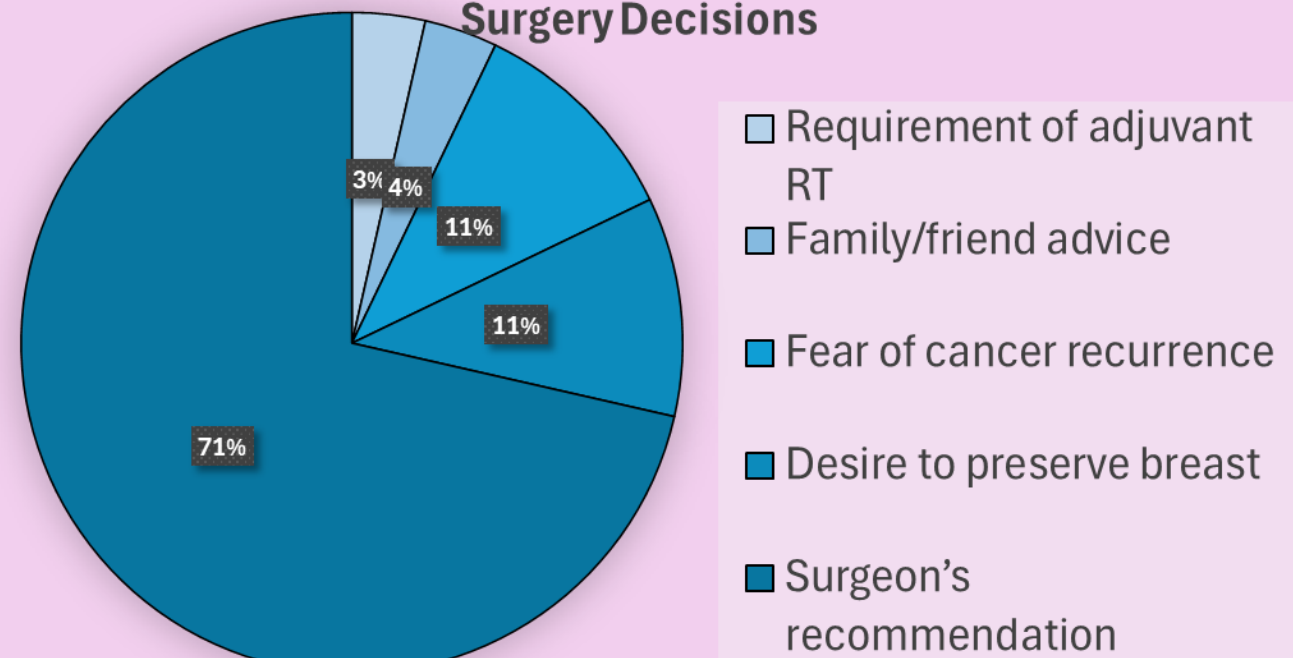


Surgical Option by Race



Despite **mastectomy** being the more common choice for breast cancer treatment, there's a growing trend towards **breast-conserving surgery**. In **2021**, due to **COVID**, most patients presented at **stage III or IV**. Among the different races, **Malays** have a higher tendency to choose **breast-conserving surgery**. **Young adults (21-40 years)** show varied preferences for all types of surgeries, valuing both **aesthetic outcomes** and **effective treatment**. **Middle-aged adults (40-65 years)** predominantly choose **mastectomy**, prioritizing **cancer removal** over **breast preservation**, likely influenced by perceptions of **risk** and **recovery**. **Older adults (over 65 years)** generally opt for **mastectomy**, driven by factors such as **comorbidities** and **physician recommendations**, focusing more on **treatment simplicity** than **cosmetic results**. The data highlights the significant role of **medical advice** in **surgical decisions**, alongside personal preferences and **social support** influences.

Patient's Perceptions - Key Factors Influencing Surgery Decisions



Conclusion

In conclusion, the study indicates a shift towards more conservative surgical options among younger patients among patient in Hospital Sultan Ismail, while older patients continue to favor more definitive surgical interventions.

This shift calls for an adaptive healthcare strategy that includes better patient education, resource allocation for breast-conserving techniques, and targeted public health initiatives to reduce late-stage presentations.

These findings can guide future policies and practices in breast cancer treatment, ensuring that they are aligned with patient needs and preferences across different age groups.

References:

1. Huang S, Yang Q, Zheng X, Chow KM, Wu J, Zhu J. Predictors of surgery choices in women with early-stage breast cancer in China: a retrospective study. BMC Cancer. 2023;23(1):23.
2. Kummerow KL, Du L, Penson DF, Shyr Y, Hooks MA. Nationwide Trends in Mastectomy for Early-Stage Breast Cancer. JAMA Surgery. 2015;150(1):9-16.
3. Boughey JC, Rosenkranz KM, Ballman KV et al. Local Recurrence After Breast-Conserving Therapy in Patients With Multiple Ipsilateral Breast Cancer: Results From ACOSOG Z11102 (Alliance). J Clin Oncol 2023; 41 (17): 3184-3193.